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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,665	01/08/2002	Lars Persson	003300-889	9024
7590	03/18/2004		EXAMINER	
BENTON S. DUFFETT, JR. BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			KUHNS, ALLAN R	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,665

Applicant(s)

PERSSON, LARS

ch

Examiner

Allan Kuhns

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/22/02</u> . | 6) <input type="checkbox"/> Other: ____. |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 8-11, 14-15, 17-21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Fink et al. (4,344,601). Fink et al. disclose the basic claimed method for injection molding comprising introducing a melt under pressure into a cavity defined by two mold halves, including (1) joining the mold halves to define the cavity by moving at least one of the mold halves along a first axis, and (2) arranging a locking means on the mold by moving along a second axis transverse to the first axis (note the action of wedges 31 and 32), the locking means having locking surfaces which grasp the mold and its joined mold halves, at least one locking surface wedgingly engaging a complementarily designed surface of the mold to cause a conversion of the force into a locking force to hold the mold halves together in their joined state. Fink et al. also teach an assembly, as in claims 2, 3, 8-11, 20 (note tension elements 26,27), a mold, as in claim 21, and the forming of an injection molded component, as in claim 23. The molds of Fink et al. are not necessarily identical, as in claim 14 and form separate groups, as in claim 15. Fink et al. teach a plurality of pairs, as in claims 17-19.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4-7, 12-13, 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fink et al. Fink et al. disclose the basic claimed assembly. It would have been obvious to one of ordinary skill in the art to form locking surfaces with an angle α within the ranges of claims 4-7, based on the illustration of wedges 31 and 32 in Fig. 1-2, in order to lock the mold of Fink et al. Coupling a fixed mold and movable mold, as in claims 12-13, is well known and would have been obvious to one of ordinary skill in the art in order to simplify the assembly. Feeding an injection mold cavity or cavities via extruders, as in claim 16 is well known and would have been obvious to one of ordinary skill in the art in order to ensure that the molding material is in a plastic state before injection. It is also well known to use less force to couple mold elements than to retain them during molding, as in claim 22, because during coupling, the force of the molding material is not acting to divide the mold halves.

4. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fink et al. as applied to claims 4-7, 12-13, 16 and 22 above, and further in view of Wimberger Friedl et al. (6,665, 192). Wimberger Friedl et al. teach the aspect of forming mobile phone components by injection molding. It would have been obvious to one of ordinary skill in the art to use an injection mold like that of Fink et al. to mold mobile phone components in order to form such components of plastic quickly and economically.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (571) 272-

1202. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allan R. Kuhns

ALLAN R. KUHN
PRIMARY EXAMINER *AJ 1732*

3-10-04